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ABSTRACT

The recommended Senate amendment to the bill (H.R. 996) to establish the Congressional Scholarships for Science, Mathematics, and Engineering, and the joint explanatory statement of the committee of conference are presented. The sections to be amended include the following: (1) Mathematics, Science and Technology Improvements; (2) Higher Education; (3) Women and Minorities in Mathematics, Science, and Engineering; (4) Education Coordination and Department of Energy Programs; (5) Science Scholarships; and (6) General Provisions and Authorization of Appropriations. (KR)

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EXCELLENCE IN MATHEMATICS AND SCIENCE

OCTOBER 24, 1990.—Ordered to be printed

Mr. ROE, from the committee of conference,
submitted the following

CONFERENCE REPORT

[To accompany H.R. 996]

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 996), to establish the Congressional Scholarships for Science, Mathematics, and Engineering, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses as follows:

That the House recede from its disagreement to the amendment of the Senate and agree to the same with an amendment as follows:

In lieu of the matter proposed to be inserted by the Senate amendment, insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the "Excellence in Mathematics, Science and Engineering Education Act of 1990".

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TITLE I—FINDINGS AND OBJECTIVES

SEC. 101. FINDINGS AND OBJECTIVES.

(a) **FINDINGS.**—The Congress finds that—

(1) science and mathematics are cornerstones of America's efforts to compete in the global marketplace and improve our standard of living and quality of life;

(2) international comparisons show American students are consistently behind their foreign counterparts in mathematics and science achievement;

(3) projections by the National Science Foundation estimate a shortage of 675,000 scientists and engineers by the year 2000;

(4) women and minorities are significantly underrepresented in the fields of mathematics, science and engineering;

(5) the achievement of universal scientific and mathematical literacy by all Americans is an essential goal of all efforts to strengthen American competitiveness;

(6) the achievement of scientific and mathematical literacy requires a strong, coordinated effort to strengthen the teaching of science and mathematics; and

(7) the Federal Government has a significant role in promoting the study of mathematics and science, by providing financial assistance to improve the general quality of programs for the study of mathematics and science, by acting as a source for information concerning successful projects and activities, by encouraging talented men and women to pursue scientific careers and by strengthening the mathematics and science educational opportunities available to women and minorities.

(b) **NATIONAL OBJECTIVES.**—The Congress declares that it shall be a national objective to—

(1) encourage American students to pursue careers in mathematics, science and engineering;

(2) improve the quality of teaching in mathematics and science made available to all Americans;

(3) have American students rank first in the world in mathematics and science;

(4) substantially increase the number of graduates with degrees in mathematics, science and engineering; and

- (5) substantially increase the number of women and minorities pursuing careers in mathematics, science and engineering.

TITLE II—MATHEMATICS, SCIENCE AND TECHNOLOGY IMPROVEMENTS

PART A—DWIGHT D. EISENHOWER MATHEMATICS AND SCIENCE EDUCATION AMENDMENTS

SEC. 201. IN-STATE APPORTIONMENT.

Section 2005 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2985) is amended by adding at the end the following:

"(c) LIMITATION.—

"(1) GENERAL RULE.—Except as provided in paragraph (2), any local educational agency that receives an allocation of less than \$6,000 under subsection (a) shall, for the purpose of providing services under this part, form a consortium with at least 1 other local educational agency or institution of higher education receiving assistance under this section.

"(2) WAIVER.—The State educational agency shall waive the application of paragraph (1) in the case of any local educational agency that demonstrates that the amount of its allocation is sufficient to provide a program of sufficient size, scope, and quality to be effective. In granting waivers under the preceding sentence, the State educational agency shall—

"(A) give special consideration to local educational agencies serving rural areas; and

"(B) consider cash or in-kind contributions provided from State or local sources that may be combined with the local educational agency's allocation for the purpose of providing services under this part."

SEC. 202. ELEMENTARY AND SECONDARY EDUCATION PROGRAMS.

Section 2006 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2986) is amended—

(1) by redesignating subsection (d) as subsection (e);

(2) by inserting after subsection (c) the following new subsection:

"(d) PRIORITY FOR TEACHER TRAINING.—

"(1) GENERAL RULE.—Except as provided in paragraph (2), in any fiscal year beginning after September 30, 1990 for which a local educational agency receives under this section an amount that is larger than the amount such agency received under this section for the fiscal year 1990, the excess of such amount over the amount received under this section for the fiscal year 1990 shall first be used to provide training for mathematics teachers and science teachers in elementary and middle schools.

"(2) WAIVER.—The Secretary may waive the application of paragraph (1) in the case of any local educational agency that demonstrates to the Secretary that mathematics teachers and science teachers in the elementary and middle schools under the jurisdiction of such local educational agency will receive ade-

quate training without using such excess amounts for such training.”; and

(3) in subsection (e) (as redesignated by paragraph (1) of this subsection), by inserting after “this section” the following: “, or \$20,000, whichever is greater,”.

(b) Section 2005 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2985) is amended by inserting after “90 percent”, “or the remainder after application of section 2006(e).”

SEC. 203. HIGHER EDUCATION PROGRAMS.

(a) Subsection (d) of section 2007 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2987) is amended by inserting after “this section” the following: “, or \$20,000, whichever is greater,”.

(b) Section 2007(b) of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2987) is amended by inserting after “95 percent”, “or the remainder after application of subsection (d).”

SEC. 204. NATIONAL PROGRAMS.

Section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2992) is amended—

(1) by redesignating subsection (d) as subsection (f); and

(2) by inserting after subsection (c) the following new subsections:

“(d) **NATIONAL CLEARINGHOUSE FOR SCIENCE, MATHEMATICS, AND TECHNOLOGY EDUCATION MATERIALS.**—

“(1) **CLEARINGHOUSE AUTHORIZED.**—The Secretary, in consultation with the Director, may award a grant or contract to establish a National Clearinghouse for Mathematics and Science Education (hereinafter in this subsection referred to as the “Clearinghouse”).

“(2) **APPLICATION AND AWARD BASIS.**—Each entity desiring to establish and operate the Clearinghouse authorized by this subsection shall submit an application to the Secretary at such time, in such manner and accompanied by such information as the Secretary may reasonably require. The grant or contract awarded pursuant to paragraph (1) shall be made on a competitive merit basis.

“(3) **DURATION.**—The grant or contract awarded under this section shall be awarded for a period of 5 years and shall be reviewed by the Secretary no later than 30 months from the date the grant or contract is awarded.

“(4) **USE OF FUNDS.**—The grant awarded under this subsection shall be used to—

“(A) maintain a permanent repository of mathematics and science education instructional materials and programs for elementary and secondary schools, including middle schools, (including, to the extent practicable, all materials and programs developed with Federal and non-Federal funds, such as instructional materials developed by the Department of Education, materials developed by State and national mathematics and science programs assisted under this part, and other instructional materials) for use

by the regional consortiums established under subpart 2 of this part and by the general public;

"(B) compile information on all mathematics and science education programs administered by each Federal agency or department;

"(C) disseminate information, programs, and instructional materials to the public, dissemination networks, and the regional consortiums under subpart 2 of this part; and

"(D) coordinate with identifiable and existing data bases containing mathematics and science curriculum and instructional materials, including Federal and non-Federal data bases.

"(5) **SUBMISSION TO CLEARINGHOUSE.**—Each Federal agency or department which develops mathematics or science education instructional material or programs, including the National Science Foundation, and the Department of Education, shall submit to the Clearinghouse copies of such material or programs.

"(6) **PEER REVIEW.**—The Secretary shall establish a peer review process to select the recipient of the award under this subsection.

"(7) **STEERING COMMITTEE.**—The Secretary may appoint a steering committee to recommend policies and activities for the Clearinghouse.

"(8) **APPLICATION OF COPYRIGHT LAWS.**—Nothing in this subsection shall be construed to allow the use or copying, in any media, of any material collected by the Clearinghouse that is protected under the copyright laws of the United States unless the permission of the owner of the copyright is obtained. The Clearinghouse, in carrying out the provisions of this subsection, shall ensure compliance with the provisions of title 17 of the United States Code.

"(e) **MODEL PROGRAMS FOR INSTRUCTION AND TRAINING IN THE USE OF COMPUTERS.**—

"(1) **GRANTS AUTHORIZED.**—The Secretary may make grants to model programs for training and instruction in the use of computers as part of the mathematics and science curriculum of elementary and secondary schools to pay the Federal share of the cost of improving and expanding such programs.

"(2) **FEDERAL SHARE.**—(A) Except as provided in subparagraph (C), the Federal share of the cost of improving and expanding a model program under this subsection shall not exceed 50 percent of such cost.

"(B) Not less than 25 percent of the non-Federal share of the cost of improving and expanding a model program under this subsection shall be in cash.

"(C) The Secretary may waive the application of this paragraph in the case of any model program operated by a school that demonstrates an inability to obtain funds from non-Federal sources for the program.

"(3) **PRIORITY.**—In awarding grants under this subsection, the Secretary shall give priority to applicants that demonstrate the ability to—

"(A) develop a program that can be applied nationally;

"(B) include a shared commitment from a combination of local parties, such as teachers, the business community, and local educational agencies;

"(C) provide teacher training programs in elementary and secondary schools, including middle schools, that are designed to improve the quality of mathematics and science instruction through the use of computers as an instructional tool;

"(D) integrate higher order analytical and problem-solving skills into mathematics and science curricula; and

"(E) provide interactive and manipulative application as part of the instructional delivery system."

SEC. 205. REGIONAL MATHEMATICS AND SCIENCE EDUCATION CONSORTIUMS.

(a) AMENDMENT TO TEXT.—Part A of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2981 et seq.) is amended—

(1) by inserting before section 2003 the following:

"Subpart 1—State Grants and National Programs";

and

(2) by inserting after section 2012 the following:

"Subpart 2—Regional Mathematics and Science Education Consortiums

"SEC. 2016. PROGRAM ESTABLISHED.

"(a) IN GENERAL.—

"(1) GRANTS AUTHORIZED.—The Secretary, in consultation with the Director, is authorized to award grants or contracts to eligible entities to establish and operate regional mathematics and science education consortia for the purpose of—

"(A) disseminating exemplary mathematics and science education instructional materials; and

"(B) providing technical assistance for the implementation of teaching methods and assessment tools for use by elementary and secondary school students, teachers and administrators.

"(2) NUMBER.—The Secretary shall, in accordance with the provisions of this section, award at least 1 grant or contract to an eligible entity in each region.

"(3) SPECIAL RULE.—In any fiscal year, if the amount appropriated pursuant to the authority of section 2023 is less than \$4,500,000, then the Secretary may waive the provisions of paragraph (2) and award grants or contracts of sufficient size, scope and quality to carry out the provisions of this section.

"(b) GRANT TERM AND REVIEW.—Grants under this subpart shall be awarded for a period of not more than 5 years and shall be reviewed before the end of the 30-month period beginning on the date the grant is awarded. Grants shall be awarded before the end of the 12-month period beginning on the date of the enactment of an Act making appropriations to carry out the provisions of this subpart.

"(c) AMOUNT.—*In making grants under this subpart, the Secretary shall assure that there is a relatively equal distribution of the funds made available among the regions, but the Secretary may award additional funds to a regional consortium on the basis of population and geographical conditions of the region being served.*

"SEC. 2017. USE OF FUNDS.

"Funds provided under this subpart may be used by a regional consortium, under the direction of a regional board established pursuant to section 2019, to—

"(1) identify, adapt, disseminate, and implement mathematics and science education instruction materials, teaching methods, and assessment tools for use by elementary and secondary school students;

"(2) assist, train and provide technical assistance to classroom teachers, administrators, and other educators to identify, implement or adapt the instructional materials, teaching methods and assessment tools described in paragraph (1);

"(3) provide for the training of classroom teachers to enable such teachers to instruct other teachers, administrators, and educators in the use of the instructional materials, teaching methods and assessment tools described in paragraph (1) in the classroom;

"(4) work with classroom teachers in the identification and adaptation of such instructional materials, teaching methods, and assessment tools for use in classrooms within the region;

"(5) assist classroom teachers, where appropriate, in securing training to enhance such teachers' subject knowledge and teaching skills in the areas of science and mathematics education;

"(6) when necessary, provide financial assistance to enable teachers and other educators to attend and participate in the activities of the regional consortium;

"(7) implement programs and activities designed to meet the needs of groups that are underrepresented in, and underserved by, mathematics and science education;

"(8) help State and local educational agencies or consortia thereof assess the need for and the desirability of regional mathematics and science academies;

"(9) develop and disseminate early childhood education mathematics and science instructional materials;

"(10) develop intergenerational projects to train senior citizen volunteers in the implementation of interactive science processes and activities for use by elementary and secondary school students;

"(11) disseminate information regarding informal mathematics and science education activities and programs offered by Federal agencies and private or public agencies and institutions within the region;

"(12) provide technical assistance in order to maximize the effectiveness of such instructional materials and programs and fulfill the instructional goals of the recipients of such materials and programs;

"(13) collect data on activities assisted under this subpart in order to evaluate the effectiveness of the activities of the regional consortiums;

"(14) if feasible, maintain on-line computer networks with all regional consortiums and the National Clearinghouse for Science and Mathematics Education Materials established under section 2012(e);

"(15) assist local and State educators in identifying science equipment needs; and

"(16) coordinate activities carried out by the regional consortium with activities carried out by the appropriate regional education laboratory supported under section 405(d)(4)(A)(i) of the General Education Provisions Act.

"SEC. 2018. APPLICATION AND REVIEW.

"(a) IN GENERAL.—Each eligible entity desiring to receive a grant under this subpart shall submit an application to the Secretary at such time, in such manner, and accompanied by such additional information as the Secretary may reasonably require. Each such application shall—

"(1) demonstrate that the eligible entity has demonstrated expertise in the fields of mathematics and science education;

"(2) demonstrate that the eligible entity shall implement and disseminate mathematics and science education instructional materials, teaching methods, and assessment tools through a consortium of the region's mathematics and science education organizations and agencies;

"(3) demonstrate that the eligible entity shall carry out the functions of the regional consortium;

"(4) describe the activities for which assistance is sought;

"(5) demonstrate that the eligible entity shall implement and disseminate mathematics and science education instructional materials, teaching methods and assessment tools;

"(6) demonstrate that emphasis will be given to programs and activities designed to meet the needs of groups that are underrepresented in, and underserved by, mathematics and science education;

"(7) describe steps to be taken to provide for the equitable participation of children and teachers from private elementary and secondary schools consistent with section 2010;

"(8) demonstrate that the business community in the region served by the regional consortium will play an integral role in designing and supporting the regional consortium's work;

"(9) demonstrate that the eligible entity will consider the resources of existing Star Schools consortia established pursuant to the Star Schools Program Assistance Act in carrying out the provisions of this part, where appropriate; and

"(10) assure that the entity will conduct its activities and supervise its personnel in a manner that effectively ensures compliance with the copyright laws of the United States.

"(b) APPROVAL OF APPLICATION.—

"(1) IN GENERAL.—The Secretary shall approve or disapprove applications submitted pursuant to subsection (a) in accordance

with the criteria and procedures established under paragraph (2).

"(2) **PROCEDURES AND CRITERIA.**—The Secretary shall develop procedures and criteria designed to ensure that grants are awarded on the basis of merit as determined by the competitive peer review process described in paragraph (3).

"(3) **NATIONAL PANEL.**—(A) The Secretary, in consultation with the Director, shall establish a national panel, or to the extent necessary, panels, to submit to the Secretary recommendations for awards of grants under this subpart. The Secretary shall appoint the members of such panel or panels.

"(B) Each panel appointed as required by subparagraph (A) shall include participation, to the extent feasible, from each region.

"SEC. 2019. REGIONAL BOARDS.

"(a) **IN GENERAL.**—Each eligible entity receiving a grant or contract under this subpart shall establish a regional board to oversee the administration and establishment of program priorities for the regional consortium established by such eligible entity. Such regional board shall be broadly representative of the agencies and organizations participating in the regional consortium.

"(b) **PROHIBITION ON USE OF FEDERAL FUNDS.**—No Federal funds may be used for the establishment or operation of a regional board required by subsection (a).

"SEC. 2020. PAYMENTS; FEDERAL SHARE; NON-FEDERAL SHARE.

"(a) **PAYMENTS.**—The Secretary shall pay to each eligible entity having an application approved under section 2018 the Federal share of the cost of the activities described in the application.

"(b) **FEDERAL SHARE.**—For purposes of subsection (a), the Federal share—

"(1) for the first and second years in which an eligible entity receives assistance shall be 80 percent;

"(2) for the third such year shall be 75 percent;

"(3) for the fourth such year shall be 65 percent; and

"(4) for the fifth and each such succeeding year shall be 50 percent.

"(c) **NON-FEDERAL SHARE.**—The non-Federal share of the cost of activities described in the application submitted pursuant to this section may be in cash or in kind, fairly evaluated.

"SEC. 2021. EVALUATION.

"(a) **EVALUATION REQUIRED.**—The Secretary, through the Office of Educational Research and Improvement, shall collect sufficient data on, and evaluate the effectiveness of, the activities of each regional consortium.

"(b) **ASSESSMENT.**—The evaluations described in paragraph (1) shall include an assessment of the effectiveness of the regional consortium in meeting the needs of the schools, teachers, administrators and students in the region.

"(c) **REPORT.**—At the end of each grant or contract period, the Secretary shall submit to Congress a report on the effectiveness of the programs conducted at each regional consortium.

"SEC. 2022. DEFINITIONS.

"For purposes of this subpart:

"(1) The term 'eligible entity' means—

"(A) a private nonprofit organization of demonstrated effectiveness;

"(B) an institution of higher education;

"(C) an elementary or secondary school;

"(D) a State or local educational agency;

"(E) a regional educational laboratory in consortium with the research and development center established under section 405(d)(4)(A) of the General Education Provisions Act; or

"(F) any combination of the entities described in subparagraphs (A) through (E);

with demonstrated expertise in mathematics and science education.

"(2) The term 'region' means a region of the United States served by a regional education laboratory that is supported by the Secretary pursuant to section 405(d)(4)(A)(i) of the General Education Provisions Act.

"(3) The term 'regional consortium' means each regional mathematics and science education consortium established pursuant to section 2016.

"SEC. 2023. AUTHORIZATION OF APPROPRIATIONS.

"There are authorized to be appropriated to carry out the provisions of this subpart \$17,000,000 for the fiscal year 1991, and such sums as may be necessary for each of the fiscal years 1992 and 1993.

"PART C—GENERAL PROVISIONS".**(b) TECHNICAL AMENDMENTS.—**

(1) CONFORMING AMENDMENTS.—Sections 2003(a), 2004(a)(1)(A), 2004(a)(1)(B), 2004(a)(5), 2004(b), 2005(a)(2)(A)(ii), 2006(a), 2006(b)(1), 2006(d)(2), 2007(a), 2007(d)(2), 2008(a), 2008(b)(2)(D), 2008(b)(3), 2008(b)(4)(A), 2009(a), 2009(b)(2), 2009(b)(3), 2009(c), 2010(a), 2010(b), 2011(a), and 2011(b) of the Dwight D. Eisenhower Mathematics and Science Education Act and the matter following section 2005(a)(2)(A)(ii) of such Act, are each amended by striking "part" and inserting "subpart".

(2) DEFINITIONS.—The heading of section 2013 of the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2993) is amended by striking "2013" and inserting "2031".

SEC. 206. FEDERAL ADMINISTRATION.

(a) REPORT ON SOURCES OF FEDERAL AID.—The Secretary shall, in consultation with the heads of other appropriate Federal agencies, prepare a report listing all sources of Federal aid for mathematics and science education.

(b) DEADLINE FOR REPORT.—The Secretary shall submit the report required by paragraph (1) to the Committee on Education and Labor of the House of Representatives and to the Committee on Labor and Human Resources of the Senate not later than March 1, 1992. The

Secretary shall also provide such report to each State educational agency and make such report available to the public.

PART B—INNOVATIVE TECHNOLOGIES

SEC. 221. EXPANDING THE USES OF INNOVATIVE TECHNOLOGIES FOR MATHEMATICS AND SCIENCE INSTRUCTION.

(a) COMPUTER TECHNOLOGIES.—

(1) **PROGRAM AUTHORIZED.**—The Director shall establish research programs on the use of computers and related technologies in basic mathematics, science, and technology instruction.

(2) **ELIGIBLE APPLICANTS.**—In carrying out the program under this subsection, the Director shall establish a merit review process to make awards on the basis of—

(A) the potential of the proposal to improve the effectiveness and productivity of basic mathematics and science education;

(B) the potential of the proposal to involve the classroom teacher in the design of the program and to provide teacher training for optimum effectiveness in the classroom; and

(C) the capability of the entity developing the innovative computer technology to provide broad and efficient dissemination of the technology to schools.

(3) **USE OF AWARDS.**—Funds awarded under this subsection may be used for—

(A) research and development of curriculum;

(B) development of computer software; and

(C) research and development of other promising technologies for educational applications as specified by the Director.

(b) DISTANCE LEARNING.—

(1) **PROGRAM AUTHORIZED.**—The Director shall establish programs to promote the use of interactive telecommunications linkages to provide mathematics and science education in the elementary and secondary classroom.

(2) **ELIGIBLE APPLICANTS.**—In carrying out the program under this subsection, the Director shall establish a merit review process to make awards to partnerships which may involve State educational agencies, local educational agencies, public television agencies, institutions of higher education, and other relevant entities, on the basis of—

(A) the potential of the proposal to improve the delivery of quality mathematics and science instruction to underserved rural and urban areas; and

(B) the potential of the proposal to provide teacher training programs for optimum effectiveness in the classroom.

(3) **USE OF AWARDS.**—Funds awarded under this subsection may be used for—

(A) the research and development of software and hardware technologies necessary to implement interstate and intrastate interactive linkages with several school districts;

(B) research on two-way audio and video interactive telecommunications and computer linkages designed to be used in conjunction with each other;

(C) research and development of curriculum;

(D) teacher training in the use of technologies developed under this section; and

(E) other appropriate telecommunications research projects that will improve mathematics and science education in underserved areas.

(c) **SPECIAL RULE.**—In carrying out the provisions of this section, the Director shall—

(1) pay particular attention to the needs of rural and urban areas which are underserved in fields of mathematics and science instruction or which have a high percentage of students receiving services under chapter 1 of title I of the Elementary and Secondary Education Act of 1965;

(2) give special consideration to proposals to extend or adapt for wider applications technologies, and associated educational materials, that the eligible applicant making the proposal has demonstrated to be effective in limited applications;

(3) ensure coordination between the National Science Foundation's programs for support of teacher training and programs developed under this section, with the objective of training teachers in the use of promising educational technologies; and

(4) consult, cooperate and coordinate with analogous programs and policies of other Federal agencies.

(d) **MATCHING REQUIREMENT.**—Awards shall be made under this section only to eligible applicants that will contribute resources, in cash or in kind, from non-Federal sources in an amount equal to 25 percent of the Federal award.

(e) **COORDINATION.**—The Director shall work with the Secretary to encourage use of technologies and educational materials developed under this section in Department of Education model programs established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act for instruction and training in the use of computers. In addition, the Director shall ensure that programs and activities developed under this section are reported to the Clearinghouse established under section 2012 of such Act for subsequent dissemination through the regional consortia established under subpart 2 of such Act.

(f) **PLANNING ACTIVITIES.**—The Office of Science and Technology Policy shall ensure that planning activities for education and human resource development and for high performance computing within the Federal Coordinating Council for Science, Engineering, and Technology include consideration of the use of national computer networks for educational purposes, including distance learning and dissemination of curricular materials.

PART C—SCIENCE-TECHNOLOGY CENTERS

SEC. 231. SCIENCE-TECHNOLOGY CENTERS.

(a) **IN GENERAL.**—

(1) **AWARDS AUTHORIZED.**—The Director is authorized to make awards to science-technology centers for—

(A) development of more effective, hands-on, interactive mathematics, science and technology programs and activities;

(B) replication or dissemination of effective programs and activities, giving special attention to the needs of female and minority children and economically disadvantaged areas; and

(C) development of new science-technology centers, including support for such centers to work with established science-technology centers to acquire proven educational programs.

(2) **AWARD BASIS.**—Funds awarded pursuant to this section shall be awarded on a competitive, merit review basis.

(3) **CRITERIA.**—Criteria for making awards under paragraph (1) may include—

(A) the potential for the educational program to have a significant impact on both formal and informal science education;

(B) the capability of the recipient institution to disseminate the material broadly;

(C) the extent of matching funds provided from non-Federal sources;

(D) the experience and qualifications of the staff of the recipient institution; and

(E) the overall excellence of the proposed program.

(b) **SPECIAL CONSIDERATION.**—In making awards pursuant to this section the Director shall give special consideration to programs designed primarily for elementary school-aged children.

(c) **GEOGRAPHIC DISTRIBUTION.**—In making awards pursuant to this section, the Director shall, to the extent practicable, ensure an equitable geographic distribution of such awards.

(d) **USE OF CLEARINGHOUSE.**—The Director shall report on such programs and activities developed under this section to the Clearinghouse established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act for subsequent dissemination through the regional consortia established under subpart 2 of such Act.

(e) **AUTHORIZED ACTIVITIES.**—Awards made under this section may be used for—

(1) scientific or technological exhibits developed for public display, either in a science-technology center or sponsored by a science-technology center but displayed in another facility;

(2) educational activities, such as curriculum development, teacher training programs, and student educational kits, developed for use by teachers for students; and

(3) other formal or informal science educational programs developed by science-technology centers.

(f) **DEFINITIONS.**—As used in this section—

(1) the term “informal science education” means those aspects of science education that occur outside the school classroom, usually voluntary, recreational, and interdisciplinary in nature, that are not directed by a specific curriculum;

(2) the term "science" means all physical, biological, and social sciences, mathematics, and engineering; and

(3) the term "science-technology center", which may include museums, planetariums, libraries and zoos, means a nonprofit institution open to the general public providing interactive exhibits, demonstrations, and informal science education designed to—

(A) further public understanding of science and technology; and

(B) illustrate how such science and technology interacts with society.

Such institutions may also be involved in formal educational activities.

PART D—GRANTS TO EDUCATIONAL AGENCIES FOR SYSTEMIC REFORM OF MATHEMATICS AND SCIENCE EDUCATION

SEC. 241. SYSTEMIC REFORM OF MATHEMATICS AND SCIENCE.

(a) **IN GENERAL.**—The Director, in consultation with the Secretary, is authorized to make awards to States or State educational agencies for projects that implement system-wide improvement in elementary or secondary school mathematics and science education.

(b) **IMPROVEMENT COMPONENTS.**—Each project for which an award is made pursuant to subsection (a) shall include the following components:

(1) increased student achievement in mathematics and science;

(2) improvements in organizational structure and decision-making;

(3) modifications in the provision and allocation of resources regarding mathematics and science instruction;

(4) improvement in the recruitment, retention and continuing professional development of teachers and other educators who instruct mathematics and science;

(5) improved mathematics and science curriculum content and learning goals; and

(6) use of other Federal funds including funds provided for the Dwight D. Eisenhower Mathematics and Science Education Act.

(c) **SPECIAL RULE.**—In making awards pursuant to subsection (a), the Director shall—

(1) to the extent practicable, ensure an equitable geographic distribution of such awards; and

(2) give priority to States or State educational agencies whose improvement plans place a strong emphasis on increasing the academic achievement of females and minority students in mathematics and science.

PART E—TECHNICAL AMENDMENT

SEC. 251. TECHNICAL AMENDMENT.

Section 14(f) of the National Science Foundation Act of 1950 is amended by inserting "or education" after "research".

SEC. 252. NATIONAL CENTER FOR EDUCATION STATISTICS.

Paragraph (4) of section 406(d) of the General Education Provisions Act (20 U.S.C. 1221e-1(d)) is amended by adding at the end the following:

"(G)(i) This paragraph shall not apply to—

"(I) the survey required by section 1303(c) of the Higher Education Amendments of 1986; or

"(II) to any longitudinal study concerning access, choice, persistence progress, or attainment in postsecondary education.

"(i) Any person, except those sworn to observe the limitation of this subsection, who uses any data as described in clause (i) provided by the Center, in conjunction with any other information or technique (including de-encryption), to identify any individual student, teacher, administrator, or other person and who discloses, publishes, or uses for a purpose other than that for which it was collected, or who otherwise violates clause (i) or (ii) of subparagraph (A), shall be fined under title 18, United States Code, or imprisoned not more than 5 years, or both.

"(iii) No employee or staff member of the Center or of an institution of higher education may be found criminally liable under subparagraph (C), based on a violation of subparagraph (A) or clause (i), if such employee or staff member has taken reasonable precautions, consistent with the purpose of this section, to ensure the confidentiality of data made available to the public.

"(H) Nothing in this paragraph shall restrict the right of the Comptroller General of the United States to gain access to any reports or other records, including information identifying individuals, in the Center's possession; except that the same restrictions on disclosure that apply to the Center under subparagraphs (B) and (G) shall apply to the General Accounting Office."

SEC. 253. AMENDMENT OF JAMES MADISON MEMORIAL FELLOWSHIP ACT.

Section 813(a)(4) of the James Madison Memorial Fellowship Act is amended by striking the second sentence thereof.

TITLE III—HIGHER EDUCATION

PART A—GRADUATE FELLOWSHIPS AND TRAINEESHIPS

SEC. 301. STATEMENT OF PURPOSE.

It is the purpose of this part to avert the substantial shortage of American scientists and engineers projected to occur over the next 15 years by significantly increasing the number of graduate fellowships awarded by the National Science Foundation and to institute a program of graduate traineeships.

SEC. 302. GRADUATE FELLOWSHIPS.

(a) *IN GENERAL.*—The Director is authorized to increase the number of graduate fellowships awarded by the Foundation, so that, in fiscal year 1993 and each fiscal year thereafter, at least 1,200 fellowships are awarded annually.

(b) *SPECIAL RULE.*—In awarding fellowships pursuant to subsection (a), the Director shall ensure that a substantially increasing number of fellowships shall be awarded to women and minorities in fiscal year 1991 and in each succeeding fiscal year through fiscal year 2000.

(c) *GRADUATE FELLOWSHIPS.*—Section 10 of the National Science Foundation Act of 1950 is amended in the second sentence by striking "or nationals" and inserting "; nationals or lawfully admitted permanent resident aliens".

SEC. 303. GRADUATE TRAINEESHIPS.

(a) *IN GENERAL.*—The Director is authorized to carry out a competitive, merit-based program of making awards to institutions of higher education to enable such institutions to conduct traineeship programs which encourage promising students, especially women and minorities, to continue their education and research in mathematics, science and engineering.

(b) *SPECIAL RULE.*—In making awards pursuant to subsection (a), the Director shall, to the extent practicable, ensure—

- (1) an equitable geographic distribution of such grants;
- (2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students in mathematics, science and engineering; and
- (3) that special consideration is given to institutions of higher education that have demonstrated progress and an ongoing commitment to upgrading their capabilities to perform high quality research, and are not among the institutions currently receiving a large number of students with National Science Foundation graduate fellowships.

PART B—CENTERS OF EXCELLENCE**SEC. 311. CENTERS OF EXCELLENCE OF UNDERGRADUATE TEACHING.**

(a) *ESTABLISHMENT.*—The Director shall establish a program of making awards to encourage institutions of higher education to improve, and to give greater attention to, undergraduate instruction in science, mathematics and engineering. Awards under this section shall be made on a competitive, merit review basis to faculty with a record of excellence in teaching using the criteria described in subsection (c). Awards under this section shall be for a 3-year period, and the amount of each award shall be comparable to those under the Presidential Young Investigator program.

(b) *USE OF FUNDS.*—Awards made under this section shall be used to improve the quality of undergraduate instruction at the recipient institution. Awards made under this section may be used for such purposes as—

- (1) development of innovative curriculum or teaching methods, including interdisciplinary courses and courses for non-science majors;
 - (2) purchase of educational equipment for use by students and faculty;
 - (3) support for research and professional activities related to undergraduate education; and
 - (4) support of teaching fellows.
- (c) **CRITERIA.**—Awards under this section shall be made on the basis of—
- (1) the commitment of the institution to improve undergraduate education in science, mathematics and engineering and to assign appropriate importance to undergraduate instruction in determining faculty compensation and as a criterion for faculty promotion;
 - (2) the teaching ability and accomplishments of the faculty member applying for the award, including evidence that the applicant has remained current with research developments; and
 - (3) the impact that the award will have on improving the quality of undergraduate instruction.
- (d) **DESIGNATION.**—Institutions receiving grants under this section shall be designated “Centers of Excellence for Undergraduate Teaching”.

TITLE IV—WOMEN AND MINORITIES IN MATHEMATICS, SCIENCE AND ENGINEERING

SEC. 401. STATEMENT OF PURPOSE.

It is the purpose of this title to expand and enhance National Science Foundation program activities that are specifically focused on increasing the educational and professional participation of women and minorities in the fields of mathematics, science and engineering

SEC. 402. DISTINGUISHED VISITING PROFESSORS.

The Director is authorized to make awards to institutions of higher education to enable such institutions to support distinguished women and minority faculty members in mathematics, science and engineering to enable such faculty members to serve as “Distinguished Visiting Professors” at academic institutions that do not have sufficient resources to attract and retain faculty members of such professional stature on a permanent basis.

SEC. 403. FACULTY AWARDS FOR WOMEN AND MINORITIES.

The Director is authorized to make awards to institutions of higher education, other than research universities, to enable such institutions to recruit and retain women and minority faculty members in the fields of mathematics, science and engineering, and to obtain equipment and facilities necessary for the research activities of such faculty members.

SEC. 404. ALLIANCES FOR MINORITY PARTICIPATION.

(a) *IN GENERAL.*—The Director is authorized to make awards to institutions of higher education to enable such institutions of higher education to establish or maintain alliances, partnerships, or other cooperative arrangements between institutions of higher education with predominately minority enrollments and institutions of higher education with high quality research programs in mathematics, science or engineering.

(b) *SPECIAL RULE.*—In making awards pursuant to this title, the Director shall, to the extent practicable, ensure—

- (1) an equitable geographic distribution of such awards; and
- (2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students from programs in mathematics, science and engineering.

TITLE V—EDUCATION COORDINATION AND DEPARTMENT OF ENERGY PROGRAMS

SEC. 501. SCIENCE EDUCATION REPORT.

(a) *REPORT REQUIRED.*—The Director of the Office of Science and Technology Policy, through the Federal Coordinating Council on Science, Engineering, and Technology, shall prepare a report on science, mathematics, and engineering education to be submitted to Congress within 1 year after the date of enactment of this Act. The report shall include—

- (1) a description of current Federal science, mathematics, and engineering education programs at all education levels;
- (2) any specific statutory changes necessary to further assist the agencies' mathematics and science education goals; and
- (3) a strategic plan for an interagency program to enhance science, mathematics, and engineering education, including—

- (A) a statement of program goals;
- (B) a description of implementation steps required to achieve such goals;

- (C) a strategy for taking advantage of the strengths of Federal research and development facilities related to science, mathematics, and engineering education;

- (D) provisions for outreach to teachers and others with direct access to students;

- (E) a system for evaluating program effectiveness, including criteria for evaluation;

- (F) criteria and procedures to facilitate and expedite either the loan or transfer of title to surplus equipment to schools, school districts, and colleges and universities;

- (G) recommendations on how to enhance exchange of employees among agencies to share expertise in mathematics and science education; and

- (H) mechanisms to coordinate the activities of the agencies which will implement the plan.

(b) *PREPARATION AND UPDATING.*—Preparation of the plan required by subsection (a)(3) shall, at a minimum, include representa-

tives of the Departments of Energy and Education, and the National Science Foundation. In subsequent years, the plan required by subsection (a)(3) shall be updated and submitted to Congress annually at the time of the President's budget request and shall include the funding levels in that budget for each agency to carry out each agency's portion of the plan.

SEC. 502. GENERAL EDUCATION REPORT.

The Department of Defense, the Department of Energy, the Department of Agriculture, the Department of Labor, the Department of Health and Human Services, the Department of Transportation, the Department of Justice, the National Aeronautics and Space Administration, the Environmental Protection Agency, and the Department of Commerce shall each prepare and submit to the Secretary of Education, within 9 months of the enactment of this Act, a report on all educational activities supported, excluding activities described in section 501. The Secretary shall compile this information and report to Congress within 1 year after the date of enactment of this Act. The report shall include—

- (1) a summary of current education programs at all levels; and
- (2) any specific statutory changes necessary to further assist the agencies' education goals.

SEC. 503. DEPARTMENT OF ENERGY PROGRAMS.

(a) AUTHORIZATION.—

(1) **IN GENERAL.**—The Secretary of Energy is authorized to—

(A) provide paid administrative leave for employees of the Department of Energy or its research and development facilities who volunteer to interact with schools, colleges, universities, teachers, or students for the purpose of science, mathematics, and engineering education;

(B) establish a volunteer talent pool of scientists, mathematicians, and engineers who have retired from the Department of Energy or its research and development facilities to—

(i) serve as "Scientists in Residence" at schools and school districts for the purpose of assisting teachers with activities such as experiments, lectures, or materials;

(ii) serve as requested, as a science counselor to students; and

(iii) otherwise assist science, mathematics, and engineering classes;

(C) establish a Young Americans' Summer Science Camp Program to provide secondary school students with a hands-on science experience as well as exposure to working scientists and career counseling; and

(D) establish a program for mathematics and science teachers, to provide such teachers serving large numbers of disadvantaged students with new strategies for mathematics and science instruction.

(2) **SPECIAL RULE.**—In carrying out the provisions of paragraph (1)(B) the Secretary of Energy, wherever possible acting through the Department's research and development facilities,

shall identify and match schools and school districts with retired scientists, mathematicians, and engineers.

(b) **FACILITIES; NON-FEDERAL FUNDS.**—Education activities assisted under this section may be conducted through Department of Energy research and development facilities. The Secretary is authorized to accept non-Federal funds to finance education activities.

(c) **LIMITATIONS.**—

(1) **NATIONAL DEFENSE PRODUCTION ACTIVITIES.**—Nothing in this section shall apply to activities of the Department of Energy or its contractors that are funded as national defense production activities.

(2) **SPECIAL RULE.**—Nothing in this section shall be construed to affect mathematics, science, and engineering education programs administered through the Department of Energy other than the Office of Energy Research.

(d) **TERMINATION PROVISION.**—The provisions of this section shall not take effect if a substantially identical program is included in the National Defense Authorization Act for Fiscal Year 1991.

(e) **DEFINITION.**—For the purpose of this section, the term “research and development facilities” means, except as provided in subsection (c)(1), all Department of Energy single purpose and multipurpose National Laboratories and research and development facilities and programs, and any other facility or program operated by a contractor funded from the Office of Energy Research.

TITLE VI—SCIENCE SCHOLARSHIPS

PART A—NATIONAL SCIENCE SCHOLARS PROGRAM

SEC. 601. PURPOSE; APPROPRIATIONS AUTHORIZED.

(a) **PURPOSE.**—It is the purpose of this part—

(1) to establish a National Science Scholars Program to recognize student excellence and achievement in the physical, life, and computer sciences, mathematics, and engineering;

(2) to provide financial assistance to students under paragraph (1) to continue their postsecondary education in such fields of study at sustained high levels of performance;

(3) to contribute to strengthening the leadership of the United States in such fields;

(4) to strengthen the United States mathematics, science, and engineering base by offering opportunities to pursue postsecondary education in life, physical, and computer sciences, mathematics, and engineering;

(5) to encourage role models in scientific, mathematics, and engineering fields for young people;

(6) to strengthen the United States mathematics, scientific, and engineering potential by encouraging equal participation of women with men in mathematics, scientific, and engineering fields; and

(7) to attract talented students to teaching careers in mathematics and science in elementary and secondary schools.

(b) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Department of Education \$4,500,000 for fiscal year 1991 for awards to National Science Scholars.

SEC. 602. SCHOLARSHIPS AUTHORIZED.

(a) **PROGRAM AUTHORITY.**—The Secretary is authorized, in accordance with the provisions of this part, to carry out a program of awarding scholarships to students for the study of the physical, life, or computer sciences, mathematics, or engineering, who—

- (1) are selected by the President;
- (2) have demonstrated outstanding academic achievement in the physical, life, or computer sciences, mathematics, or engineering; and
- (3) show promise of continued outstanding academic performance in such field of study.

(b) **PERIOD OF AWARDS.**—

(1) **PERIOD OF INITIAL AWARD.**—A student who satisfies the requirements of section 604(a) may receive a scholarship, for a period of 1 academic year, for the first year of undergraduate study at an institution of higher education.

(2) **CONTINUATION AWARDS.**—A student who satisfies the requirements of section 604(b) may receive additional scholarships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study. A student may receive additional scholarships for not more than 3 academic years of undergraduate study, except that, in the case of a student who is enrolled in an undergraduate course of study that requires attendance for 5 academic years, the student may receive additional scholarships for not more than 4 academic years of undergraduate study.

(c) **USE AT ANY INSTITUTION PERMITTED.**—A student awarded a scholarship under this part may attend any institution of higher education, as defined in section 1201(a) of the Higher Education Act of 1965.

(d) **NATIONAL SCIENCE SCHOLARS.**—Students awarded scholarships under this part shall be known as "National Science Scholars".

SEC. 603. SELECTION OF SCHOLARS.

(a) **SELECTION CRITERIA FOR INITIAL AWARDS.**—

(1) **SELECTION CRITERIA.**—The Director of the National Science Foundation shall develop and submit to the Secretary proposed criteria to be used in the selection of National Science Scholars for initial year awards under section 602(b)(1). Such criteria shall provide for the selection of such scholars on the basis of potential to successfully complete a postsecondary program in the physical, life, or computer sciences, mathematics, or engineering, and on the basis of motivation to pursue a career in such fields. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities. The Director shall determine the proposed criteria for measuring the potential and motivation of nominees.

(2) **PUBLICATION.**—The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

(b) SELECTION PROCESS FOR INITIAL AWARDS.—

(1) **NOMINATING COMMITTEE.**—Each State desiring to qualify its students for selection as a National Science Scholar shall establish a nominating committee. Such committee shall be appointed by the chief State school officer or by an existing grant agency or panel designated by such officer, and shall be approved by the Secretary. The nominating committee shall be a broad-based committee composed of educators, scientists, mathematicians, and engineers, who shall serve as volunteers without compensation.

(2) **NOMINATIONS.**—The nominating committee in each State shall submit to the President the nominations of at least four individuals from each congressional district in the State, at least half of whom are female. Such selections shall be ranked in order of priority.

(3) **SELECTION.**—The President, after consultation with the Secretary and the Director of the National Science Foundation, shall select two National Science Scholars for each academic year from each congressional district, at least one of whom shall be female.

(4) **ANNOUNCEMENT AND AWARD OF SCHOLARSHIPS.**—The selection process shall be completed, and the announcement of the selection of National Science Scholars shall be made by the President prior to January 1st of each fiscal year. The Secretary shall notify each Member of Congress of selections made from such Member's district and State before the public announcement by the President. Presentation of scholarships may be made in a public ceremony.

(5) **CONGRESSIONAL DISTRICT.**—For purposes of this subsection, the term "congressional district" includes the part or all of a State (within the meaning of section 1201(b) of the Higher Education Act of 1965) represented by a Member or Delegate of the House of Representatives, and includes the Commonwealth of the Northern Mariana Islands.

(c) **CONTINUATION AWARDS.**—The Secretary shall award additional scholarships under section 602(b)(2) to recipients of initial awards under section 602(b)(1) who the Secretary determines meet the requirements of section 604(b).

(d) **DISBURSAL OF SCHOLARSHIP PROCEEDS.**—Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this part to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student until the student is enrolled at an institution of higher education.

(e) **SPECIAL RULE.**—The Director and the Secretary shall encourage the support and assistance of civic groups, the business community, professional associations, institutions of higher education, and others in providing scholarship assistance to National Science Scholarship finalists.

SEC. 604. ELIGIBILITY OF SCHOLARS.

(a) **REQUIREMENTS FOR INITIAL AWARD.**—To be eligible to receive a scholarship under section 602(b)(1), a student shall—

(1) be scheduled to graduate from a public or private secondary school, or to obtain the equivalent of a certificate of graduation (as recognized by the State in which the student resides), during the school year in which the award is made;

(2) be a citizen or national of the United States or the entities set forth in section 603(b)(5), or be an alien lawfully admitted to the United States for permanent residence;

(3) have demonstrated outstanding academic achievement in secondary school in physical, life, or computer sciences, mathematics, or engineering;

(4) have been accepted for enrollment at an institution of higher education as a full-time undergraduate student (as determined by the institution); and

(5) have declared a major in 1 of the physical, life, or computer sciences, mathematics, or engineering, or provided a written statement to the State of his or her intent to major in 1 of these fields of study, if it is the policy of the institution at which the student has been accepted for enrollment that students not declare a major until a later point in their course of study.

(b) **REQUIREMENTS FOR CONTINUATION AWARDS.**—A student who has received a scholarship under section 602(b)(1) may receive a scholarship for a subsequent academic year of undergraduate education under section 602(b)(2) if the student—

(1) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;

(2) continues to major in, or provides a statement to the State as described in subsection (a)(5) of his or her continuing intent to major in, one of the physical, life, or computer sciences, mathematics, or engineering; and

(3) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(c) **WAIVER OF FULL-TIME ATTENDANCE REQUIREMENT.**—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(d) **FAILURE TO MEET ELIGIBILITY REQUIREMENTS.**—In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this part shall be suspended in accordance with the regulations of the Secretary.

(e) **REINSTATEMENT OF ELIGIBILITY.**—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this part may be reinstated if the recipient seeks to reenter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, childbearing, and other family responsibilities.

(f) **NOTIFICATION OF SECONDARY SCHOOLS.**—The Secretary shall notify all public and private secondary schools and all institutions of higher education in each State annually of the availability of scholarships under this part.

SEC. 605. SCHOLARSHIP AMOUNT.

(a) **AMOUNT OF AWARD.**—Except as provided in subsections (b) and (c), the amount of a scholarship awarded under this part for any academic year shall be \$5,000.

(b) **RELATION TO COST OF ATTENDANCE.**—Notwithstanding subsection (a), the amount of a scholarship awarded under this part shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this part shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(c) **ADJUSTMENTS FOR INSUFFICIENT APPROPRIATIONS.**—In the event that funds available in a fiscal year are insufficient to fully fund all awards under this part, the amount paid to each student shall be reduced proportionately.

SEC. 606. SUMMER EMPLOYMENT OPPORTUNITIES FOR SCHOLARS.

(a) **PRIORITY FOR SUMMER EMPLOYMENT.**—To the extent that they are otherwise qualified, students receiving scholarships under this part shall be given priority consideration for federally financed summer employment in federally funded research and development centers, that, to the maximum extent practicable, complements and reinforces the educational program of these students.

(b) **FEDERAL AGENCY COOPERATION.**—Federal agencies shall cooperate fully with the Secretary and participate actively in providing appropriate summer employment opportunities for such students.

PART B—ROBERT NOYCE SCHOLARSHIPS**SEC. 621. ROBERT NOYCE SCHOLARSHIPS.**

(a) **PROGRAM AUTHORIZED.**—There is established a scholarship program for students in a baccalaureate degree program in physical, life, or computer sciences, mathematics, or engineering who are willing to commit themselves to teaching elementary or secondary school mathematics or science.

(b) **PERIOD OF AWARDS.**—

(1) **PERIOD OF INITIAL AWARD.**—A student who satisfies the requirements of subsection (g)(1) may receive a scholarship, for a period of 1 academic year of undergraduate study at an institution of higher education.

(2) **CONTINUATION AWARDS.**—

(A) **FIRST CONTINUATION AWARD.**—A student who satisfies the requirements of subsection (g)(2) may receive an additional scholarship, awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study.

(B) **SECOND CONTINUATION AWARD.**—An additional period of scholarship support, not to exceed 1 year, shall be available to recipients of scholarships under subsection (a) who have completed requirements for the baccalaureate degree but require additional education courses in order to obtain certification to teach.

(c) **USE AT ANY INSTITUTION PERMITTED.**—A student awarded a scholarship under this section may attend any institution of higher education.

(d) **DESIGNATION.**—The individuals awarded scholarships under subsection (a) shall be referred to as the "Robert Noyce Mathematics and Science Teacher Corps".

(e) **SELECTION.**—

(1) **SELECTION PROCESS FOR INITIAL AWARDS.**—

(A) **SELECTION CRITERIA.**—The Director shall develop and submit to the Secretary proposed application procedures and criteria to be used in the selection of nominees under this section. Such criteria shall provide for the selection of such nominees on the basis of academic merit and demonstrated accomplishment in physical, life, or computer science, mathematics, or engineering, and on the basis of motivation to pursue a career in science, mathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.

(B) **PUBLICATION.**—The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

(C) **MERIT REVIEW PANEL.**—Award recipients shall be nominated from among applicants by a merit review panel composed of 8 individuals, 4 of whom shall be appointed by the Director and 4 of whom shall be appointed by the Secretary. Members of the panel shall not be employees of the United States and shall serve as volunteers without compensation. Nominees shall be selected on the basis of selection criteria, which shall be developed and published in accordance with subparagraphs (A) and (B). The panel shall rank the nominees in order of priority.

(D) **AWARDING OF SCHOLARSHIPS.**—The panel shall submit its nominees to the President, who shall, after consultation with the Director and the Secretary, award not more than 500 scholarships under subsection (a).

(2) **CONTINUATION AWARDS.**—The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (g)(2) or (b)(2)(B).

(f) **DISBURSAL OF SCHOLARSHIP PROCEEDS.**—Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

(g) **ELIGIBILITY.**—

(1) **INITIAL ELIGIBILITY.**—Only individuals who are—

(A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence;

(B) majoring in the physical, life, or computer sciences, mathematics, or engineering;

(C) in the last 2 years of a baccalaureate degree program; and

(D) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education), shall be eligible for awards under this section.

(2) **REQUIREMENTS FOR FIRST CONTINUATION AWARDS.**—A student who has received a scholarship under this section may receive a first continuation award under subsection (b)(2)(A) for a subsequent academic year of undergraduate education if the student—

(A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;

(B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and

(C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(h) **WAIVER OF FULL-TIME ATTENDANCE REQUIREMENT.**—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(i) **FAILURE TO MEET ELIGIBILITY REQUIREMENTS.**—In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

(j) **REINSTATEMENT OF ELIGIBILITY.**—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section could be reinstated if the recipient seeks to reenter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, child-rearing, and other family responsibilities.

(k) **NOTIFICATION OF SCHOOLS.**—The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.

(l) **SCHOLARSHIP AMOUNT.**—

(1) **AMOUNT OF AWARD.**—Except as provided in paragraph (2), the amount of a scholarship awarded under this section for any academic year shall be \$5,000.

(2) **RELATION TO COST OF ATTENDANCE.**—Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this section shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(m) **SERVICE REQUIREMENT.**—

(1) **TEACHING OBLIGATION.**—Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete, within 6 years after graduation from the bac-

calaureate degree program for which the award was made or within 6 years after completion of the additional period of scholarship support, if applicable, at least 2 years of service as an elementary or secondary mathematics or science teacher for each year of scholarship support under this section, except that such requirement shall not exceed a total of 4 years. Service required under this paragraph shall be performed at a school receiving assistance under chapter 1 of title I of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 2701 et seq.).

(2) **REPAYMENT ALTERNATIVE.**—As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States,

except that such payment shall be reduced, for each year of service that the individual has successfully completed, by a fraction equal to 1 divided by the number of years of service the student is obligated to perform. Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

(3) **EXCEPTIONS.**—The Secretary may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965, except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.

(n) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the National Science Foundation, for transfer to the Department of Education, \$2,500,000 for fiscal year 1991, \$5,000,000 for fiscal year 1992, and \$7,500,000 for fiscal year 1993, to carry out the provisions of this part.

PART C—NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY

SEC. 621. NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY.

(a) **ESTABLISHMENT OF ACADEMY.**—The Secretary shall establish a National Academy of Science, Space, and Technology for the instruction and preparation of selected individuals for service in a science, mathematics, or engineering related capacity in the employ of the United States or a United States corporation.

(b) **ADVISORY BOARD.**—

(1) **MEMBERSHIP.**—The Secretary, after consultation with the Director, shall appoint an Advisory Board for the Academy consisting of a broadly representative group of scientists, engineers,

educators, and businessmen representing high-technology industries.

(2) **FUNCTIONS.**—*The Advisory Board shall—*

(A) develop criteria to be used in the selection of recipients of scholarships under this section;

(B) select scholarship recipients from among nominations received under subsection (e); and

(C) identify fields of science, mathematics, and engineering which will be given priority in awarding scholarships under this section.

In making determinations under subparagraph (C), the Advisory Board shall take into consideration requirements of government and industry for technical personnel in fields of science, mathematics, and engineering which are relevant to emerging industrial technologies of significant economic importance and in which shortages in the workforce of the United States are projected.

(c) **SCHOLARSHIPS AUTHORIZED.**—(1) *The Academy shall establish a scholarship program for students to pursue the baccalaureate degree in fields of science, mathematics, or engineering who are willing to commit themselves to service described in subsection (n).*

(2) *A student who satisfies the requirements of subsection (h)(1) may receive a scholarship for a period of 1 academic year of undergraduate study at a Member Institute.*

(3) *A student who satisfies the requirements of subsection (h)(2) may receive additional scholarships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study to a maximum of 3 awards.*

(4) *The individuals awarded scholarships under this section shall be referred to as the "Science, Space, and Technology Corps".*

(5) *An individual awarded a scholarship under this section may attend any institution of higher education that offers the baccalaureate degree in science, mathematics, or engineering. Such institutions shall be designated as Member Institutes of the Academy.*

(d) **NOMINATIONS FOR SCHOLARSHIP AWARDS.**—*Members and Delegates of the House of Representatives may each nominate 6 or more individuals, at least half of whom are female, for scholarships.*

(e) **SELECTION FOR INITIAL AWARDS.**—(1) *The Board shall develop criteria for selection of nominees under this section. Such criteria shall provide for the selection of such nominees on the basis of academic merit and motivation to pursue a career in science, mathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.*

(2) *From among nominees received pursuant to subsection (d), the Board shall select for award of a scholarship one individual from each Congressional District.*

(f) **CONTINUATION AWARDS.**—*The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (h)(2).*

(g) **DISBURSAL OF SCHOLARSHIP PROCEEDS.**—*Scholarship proceeds shall be disbursed on behalf of students who receive scholarships*

under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

(h) ELIGIBILITY.—

(1) INITIAL ELIGIBILITY.—Only individuals who are—

(A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence;

(B) majoring in the physical, life, or computer sciences, mathematics, or engineering; and

(C) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education),
shall be eligible for awards under this section.

(2) REQUIREMENTS FOR CONTINUATION AWARDS.—A student who has received a scholarship under this section may receive a continuation award under subsection (f) for a subsequent academic year of undergraduate education if the student—

(A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;

(B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and

(C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

(i) WAIVER OF FULL-TIME ATTENDANCE REQUIREMENT.—The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

(j) FAILURE TO MEET ELIGIBILITY REQUIREMENTS.—In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

(k) REINSTATEMENT OF ELIGIBILITY.—The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section may be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, child-rearing, and other family responsibilities.

(l) NOTIFICATION OF SCHOOLS.—The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.

(m) SCHOLARSHIP AMOUNT.—

(1) AMOUNT OF AWARD.—Except as provided in paragraphs (2) and (3), the amount of a scholarship awarded under this section for any academic year shall be \$5,000.

(2) RELATION TO COST OF ATTENDANCE.—Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965. A scholarship awarded under this section shall not be reduced on the basis of the stu-

dent's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

(3) **ADJUSTMENTS FOR INSUFFICIENT APPROPRIATIONS.**—In the event that funds available in a fiscal year are insufficient to fully fund all awards under this section, the amount paid to each student shall be reduced proportionately.

(n) **SERVICE REQUIREMENT.**—

(1) **SCIENCE, SPACE, AND TECHNOLOGY SCHOLARSHIPS.**—Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete four years of—

(A) service in a physical, life, or computer science, mathematics, or engineering related capacity in the employ of the United States or any corporation or other entity, organized under the laws of the United States or of a State of the United States, at least 50 percent of which is owned by United States nationals, and which is engaged in scientific or engineering research or endeavor;

(B) postgraduate education in physical, life, or computer science, mathematics, or engineering at an institution of higher education; or

(C) a combination of service and education described under subparagraphs (A) and (B).

(2) **REPAYMENT OBLIGATION.**—As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received the amounts were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States. Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

(3) **EXCEPTIONS.**—The Secretary may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965, except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.

(o) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to carry out this section \$2,200,000 for fiscal year 1991.

PART D—ADDITIONAL PROVISIONS

SEC. 631. EFFECT OF CERTAIN CONTROLLED SUBSTANCE AND FELONY CONVICTIONS.

(a) **GENERAL RULE.**—Except as provided in subsection (b), or by a court under the authority of section 5301 of the Anti-Drug Abuse Act of 1988 (102 Stat. 4310), if any person is convicted under Federal or State law of the illegal use, possession, or distribution of a controlled substance (as such term is defined in the Controlled Substances Act), or of any crime which is a felony under Federal law or for an act which, if committed in a Federal jurisdiction, would be a felony under Federal law, and such crime was committed during a period in which such person received an award under this title, such person shall not be eligible to receive any further such awards, and shall be liable to the United States for the repayment, within 1 year after such conviction, of all amounts received pursuant to such awards, plus the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as of the time of such conviction, as determined by the Treasurer of the United States.

(b) **EXEMPTION.**—A person subject to the provisions of subsection (a) may be exempted from those provisions in whole or in part if—

(1) that person, within 90 days of a conviction described in subsection (a), petitions the Secretary of Education for a good cause exemption from subsection (a); and

(2) the Secretary of Education approves the petition.

SEC. 632. REPORT.

The National Science Foundation shall prepare and submit to the Congress no later than 1 year after the date of enactment of this Act a report examining current efforts to improve the quality of elementary and secondary mathematics and science education and career potential for the underprivileged through joint efforts of business, school districts, and institutions of higher education, and recommending ways the Federal Government may encourage such efforts. The report shall include, to the extent possible, a comprehensive list of existing efforts, an assessment of what factors have made some such efforts more successful than others, and a review of the extent to which such efforts have drawn on Federal programs.

TITLE VII—GENERAL PROVISIONS AND AUTHORIZATION OF APPROPRIATIONS

PART A—AUTHORIZATION OF APPROPRIATIONS

SEC. 701. AUTHORIZATION OF APPROPRIATIONS.

From the amounts authorized to be appropriated to the National Science Foundation pursuant to the National Science Foundation Authorization Act of 1988, there are authorized to be appropriated—

(1) in addition to any amount obligated in fiscal year 1990 for programs on applications of advanced technology within the Education and Human Resources Directorate—

(A) \$10,000,000 for fiscal year 1991 to carry out the provisions of section 221, of which \$5,000,000 shall be available to carry out the provisions of subsection (a) of such section and \$5,000,000 shall be available to carry out the provisions of subsection (b) of such section;

(B) \$11,000,000 for fiscal year 1992 to carry out the provisions of section 221, of which \$5,500,000 shall be available to carry out the provisions of subsection (a) of such section and \$5,500,000 shall be available to carry out the provisions of subsection (b) of such section; and

(C) \$12,500,000 for fiscal year 1993 to carry out the provisions of section 221, of which \$6,250,000 shall be available to carry out the provisions of subsection (a) of such section and \$6,250,000 shall be available to carry out the provisions of subsection (b) of such section;

(2) in addition to any amounts obligated in fiscal year 1990 for informal science education programs, \$15,000,000 for fiscal year 1991, \$17,000,000 for fiscal year 1992, and \$19,400,000 for fiscal year 1993 to carry out the provisions of section 231;

(3) in addition to any amounts obligated in fiscal year 1990 for statewide education programs, \$17,000,000 for fiscal year 1991, \$19,400,000 for fiscal year 1992, and \$22,100,000 for fiscal year 1993 to carry out the provisions of section 241;

(4) in addition to any amounts obligated in fiscal year 1990 for undergraduate education programs, \$16,000,000 for fiscal year 1991, \$18,200,000 for fiscal year 1992, and \$20,700,000 for fiscal year 1993 to carry out the provisions of section 311;

(5) \$37,900,000 for fiscal year 1991, \$60,600,000 for fiscal year 1992, and \$67,800,000 for fiscal year 1993 to support of graduate fellowships, including expansion of the number of graduate fellowships pursuant to the provisions of section 302;

(6) \$10,000,000 for fiscal year 1991, \$20,000,000 for fiscal year 1992, and \$30,000,000 for fiscal year 1993 to carry out the provisions of section 303; and

(7) in addition to any amounts obligated in fiscal year 1990 for programs to increase participation by women and minorities in careers in science, mathematics and engineering, \$17,000,000 for fiscal year 1991, \$19,400,000 for fiscal year 1992, and \$22,000,000 for fiscal year 1993 to carry out the provisions of title IV.

PART B—DEFINITIONS

SEC. 711. DEFINITIONS.

As used in this Act—

(1) the term "consortium", refers to a combination of school districts, colleges, universities, other formal or informal educational entities, State and local governments, professional organizations, community groups, businesses and industries, or any combination thereof;

(2) the term "Director", unless otherwise specified, shall refer to the Director of the National Science Foundation;

(3) the term "elementary school" has the same meaning given that term in section 1471(8) of the Elementary and Secondary Education Act of 1965;

(4) the term "Foundation" refers to the National Science Foundation;

(5) the term "institution of higher education" has the same meaning given that term in section 1201(a) of the Higher Education Act of 1965;

(6) the term "local educational agency" has the same meaning given that term in section 1471(12) of the Elementary and Secondary Education Act of 1965;

(7) the term "minorities" refers to members of those racial and ethnic groups underrepresented in mathematics, science and engineering, including American Indians, Black Americans, Hispanic Americans, Native Alaskans, or Native Pacific Islanders;

(8) the terms "scholarship" and "fellowship" refers to a financial award made to a student which enables a student to pursue a desired course of study at an institution of higher education;

(9) the term "secondary school" has the same meaning given that term in section 1471(21) of the Elementary and Secondary Education Act of 1965;

(10) the term "Secretary", unless otherwise specified, refers to the Secretary of the Department of Education;

(11) the term "State educational agency" has the same meaning given that term in section 1471(23) of the Elementary and Secondary Education Act of 1965; and

(12) the term "traineeship" means a form of financial support provided to a: institution of higher education to—

(A) be used to provide stipends to graduate students selected by such institution; and

(B) help defray educational costs of educating such graduate students.

PART C—MISCELLANEOUS PROVISIONS

SEC. 721. STUDENT ASSISTANCE GENERAL PROVISIONS.

The Secretary shall extend until January 1, 1991 the public comment period on the proposed regulations modifying part 668 of title 34, Code of Federal Regulations, concerning clock and credit hour conversion.

SEC. 722. PUBLIC LAW 81-874.

(a) **FEDERAL CONTRIBUTIONS.**—Section 2 of Public Law 81-874 (20 U.S.C. 237) is amended—

(1) by redesignating the second subsection (d), as added by section 7(a) of Public Law 101-305, as subsection (e); and

(2) by adding a new subsection at the end thereof to read as follows:

"(f) Beginning with fiscal year 1991, any school district which (1) as demonstrated by written evidence from the United States Forest Service satisfactory to the Secretary, contains between 50,000 and 55,000 acres of land that has been acquired by the United States

Forest Service between 1915 and 1990, and (2) serves a county chartered by State law in 1875, shall be deemed to have met the requirements of subsection 2(a)(1)(C)."

(b) **PAYMENTS.**—Section 5(e)(1)(D) of Public Law 81-874 (20 U.S.C. 240) (hereafter in this section referred to as the "Act") shall not apply to any local educational agency that was an agency described in section 5(c)(2)(A)(ii) of the Act in fiscal year 1990 but is an agency described in section 5(c)(2)(A)(iii) in fiscal year 1991, 1992, or 1993 as a result of families moving off base due to a landfill or health concern or an environmental hazard, or due to risk assessment, investigation, testing or remediation for such concern or hazard, and any such local educational agency shall be deemed to belong to the category described in section 5(c)(2)(A)(ii) for each of the fiscal years 1991, 1992, and 1993.

(c) **SUNSET PROVISION.**—The provisions of subsection (b) shall apply only during the period beginning on the date of enactment of this Act and ending on September 30, 1993.

(d) **DISCRETIONARY ALLOCATIONS.**—

(1) **IN GENERAL.**—Section 5(e)(1)(B) of Public Law 81-874 (20 U.S.C. 240(e)(1)(B)) is amended to read as follows:

"(B)(i) For any fiscal year beginning after September 30, 1990, the Secretary shall first allocate to any local educational agency that is, and in fiscal year 1987 would have been, described in subsection (c)(3)(A)(i) and that received a payment under section 3(b) for fiscal year 1987, an amount that is not less than the product of—

"(I) 100 percent of the per pupil amount paid to such agency under section 3(b) for fiscal year 1987; and

"(II) the number of children described in section 3(b) in average daily attendance in the fiscal year for which the determination under section 3(b) is made, not to exceed the number of such eligible children claimed by such agency in fiscal year 1987.

"(ii) If the amount appropriated for section 3(b) in any fiscal year exceeds the amount appropriated for such section for fiscal year 1990, the Secretary shall use such excess funds—

"(I) first, to allocate to any such agency, for such children that exceed the number of such eligible children claimed by the agency in fiscal year 1987, the amount described in subsection (c)(3)(B)(i)(I); and

"(II) second, to allocate remaining funds in accordance with subsection (c)(3)(B)."

(2) **SPECIAL RULE.**—Section 5(e) of Public Law 81-874 (20 U.S.C. 240(e)) is further amended by striking out paragraph (3).

SEC. 723. TECHNICAL AMENDMENT.

Section 312(5) of the Adult Education Act (20 U.S.C. 1301a(5)) is amended by inserting ", or to perform a service function for." after "direction of" the first place it appears.

PART D—EFFECTIVE DATE

SEC. 731. EFFECTIVE DATE.

The provisions of this Act shall take effect on October 1, 1990, or the date of enactment of this Act, whichever is later.

And the Senate agree to the same.

That the House recede from its disagreement to the amendment of the Senate to the title of the bill, and agree to the same.

And the Senate agree to the same.

ROBERT H. ROE,
GEORGE E. BROWN, Jr.,
DOUG WALGREN,
TIM VALENTINE,
DAVID E. PRICE,
ROBERT S. WALKER,
SHEREY BOEHLERT,
D. FRENCH SLAUGHTER, Jr.,
GUS HAWKINS,
WILLIAM D. FORD,
PAT WILLIAMS,
MAJOR R. OWENS,
TOM SAWYER,
BILL GOODLING,
TOM COLEMAN,
STEVE BARTLETT,

Managers on the Part of the House.

EDWARD M. KENNEDY,
CLAIBORNE PELL,
CHRISTOPHER J. DODD,
ORRIN HATCH,
NANCY LANDON KASSEBAUM,

Managers on the Part of the Senate.

JOINT EXPLANATORY STATEMENT OF THE COMMITTEE OF CONFERENCE

The managers on the part of the House and the Senate at the conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 996), An Act to establish the Congressional Scholarships for Science, Mathematics, and Engineering, and for other purposes, submit the following joint statement to the House and the Senate in explanation of the effect of the action agreed upon by the managers and recommended in the accompanying conference report.

The Senate amendment to the text of the bill struck out all of the House bill after the enacting clause and inserted a substitute text.

The House recedes from its disagreement to the amendment of the Senate with an amendment which is a substitute for the House bill and the Senate amendment. The differences between the House bill, the Senate amendment, and the substitute agreed to in conference are noted below, except for clerical corrections, conforming changes made necessary by agreements reached by the conferees, and minor drafting and clarifying changes.

1A. Title: The House bill's title reads "An Act to establish the Congressional Scholarships for Science, Mathematics, and Engineering, and for other purposes." The Senate amendment's title is "A bill to promote excellence in American mathematics, science

and engineering education; enhance the scientific and technical literacy of the American public; stimulate the professional development of scientists and engineers; increase the participation of women and minorities in careers in mathematics, science, and engineering; and for other purposes."

House recedes with the amendment to entitle the Act, "An Act to improve the quality of Mathematics, Science and Engineering Education in the United States and for other purposes."

1B. Short Title: The Senate amendment's short title is "Excellence in Mathematics, Science and Engineering Education Act of 1990." The House bill contains the short title, "Congressional Scholarship for Science, Mathematics and Engineering Act."

The House recedes.

2. Table of Contents. The Senate amendment but not the House bill has a table of contents.

House recedes with an amendment to change the table of contents to conform to the conference substitute.

3. Title I: Findings. The House bill contains a "Findings" section. The Senate amendment contains a similar "Findings" section, but the wording is different.

The House recedes with an amendment to include some items of the House bill's "Findings" section and delete some items from subsection (a) of the Senate "Findings" section.

4. National Objectives. The Senate amendment but not the House bill contains a "National Objectives" section.

The House recedes.

5. Purposes: The House bill not the Senate amendment contains a "Purposes" section.

The House recedes.

6. Declaration of Policy and Principles: Policy. The Senate amendment, but not the House bill, contains a "Policy" section.

The Senate recedes.

7. Declaration of Policy and Principles: Principles. The Senate amendment but not the House bill, has a "Principles" section.

The Senate recedes.

8. National Goal. The Senate amendment, but not the House bill, establishes a "National Goal" and designates the decade from 1990 to 1999 as the "Decade of Excellence in American Mathematics, Science and Engineering."

The Senate recedes.

9. Assessment and Achievement. The Senate amendment but not the House bill, requires the National Science Foundation, the Department of Education and Science Advisor to the President to set forth objectives, develop criteria for assessing national achievement, collect data, sponsor a survey in 1999 to determine and report comparative improvement of American students.

The Senate recedes.

10. Information Dissemination: The Senate amendment establishes a National Clearinghouse for Mathematics, Science and Technology Education, and authorizes \$5 million for fiscal year 1991 and such sums through fiscal year 1995 for this activity.

The House recedes with an amendment to the Dwight D. Eisenhower Mathematics and Science Education Act (20 U.S.C. 2985) to (1) establish a Clearinghouse; (2) require local education agencies

which would receive an Eisenhower grant of less than \$6000 to form consortia (requires the State education agency to waive the requirement under certain conditions); (3) place a priority in the Eisenhower Act on serving elementary and middle school teachers and allows the Secretary to waive the provision; (4) set a floor on the amount available for the state educational agencies or the administration of the local educational agencies' programs; and (5) set a floor on the amount available for the state educational agency for administration of the higher education programs; and (6) allow the Secretary to award grants for training and instruction in computers.

This legislation results from the efforts of a number of friends and admirers of Dwight D. Eisenhower who were all of the opinion that an Eisenhower National Education program would be a most fitting Centennial tribute to Dwight D. Eisenhower from a grateful nation for his world leadership.

The Dwight D. Eisenhower Society of Gettysburg started its program for the Centennial in 1987, and one of the cornerstones of its efforts was a national scholarship or educational program in the name of our 34th President. The Society submitted the first draft of educational/scholarship legislation in 1988. The Society stated, "claiming no pride of authorship, the thrust was to get a bill underway in the House and Senate that would eventually result in an Eisenhower Educational Program. The society worked with Senators Heinz, Spector and Kennedy and Congressman Goodling and their staffs, and, although admirable legislation originated from some of these Offices, it was not titled under the name of Dwight D. Eisenhower.

In 1988, on behalf of the Eisenhower Society, Congressman Goodling was able to have the existing Math and Science program changed to the Dwight D. Eisenhower Math and Science Teacher Training Act. With Congressman Sawyer, he was able to help guide the current amendments to the existing Dwight D. Eisenhower Math and Science program through the House of Representatives with emphasis on training and retraining of elementary and middle school teachers. These amendments are also in the name of the Eisenhower Society.

The Society is reminded that Eisenhower once quoted Aristotle on the paramount need of a nation to educate its youth: "Those who have meditated on the art of governing mankind have been convinced that the fate of empires depends upon the education of youth."

10A. The National Clearinghouse: Establishment. The Senate amendment requires the Secretary in consultation with the Director of the National Science Foundation to establish a Clearinghouse.

The House recedes with an amendment which amends the Eisenhower Act allowing the Secretary to establish a National Clearinghouse. The amendment also requires the Secretary to establish a peer review process in selecting the Clearinghouse and to appoint a Steering Committee to recommend policies and activities for the Clearinghouse.

10B. National Clearinghouse: Grant Period. The Senate amendment requires the grant or contract be awarded for a 5-year period and reviewed by the Secretary within 30 months of the grant.

The House recedes.

10C. National Clearinghouse: Use of Funds. The Senate amendment requires the Clearinghouse to maintain a permanent repository of mathematics, science and technology education instructional materials. The Senate amendment also requires that the Clearinghouse compile information.

The House recedes with an amendment urging collection of non-federally funded materials to the extent practicable, and requiring collection of information on all mathematics and science education programs administered by each Federal agency or department. The amendment also requires the inclusion of materials to be used for the regional consortia.

10D. National Clearinghouse; Coordination. The Senate amendment requires coordination with the data bases.

The House recedes.

10E. National Clearinghouse: Dissemination. The Senate amendment requires the Clearinghouse to disseminate instructional materials and programs.

The House recedes with an amendment including dissemination to the public, dissemination networks and the Regional Consortia (see 11).

The managers intend that materials from the National Diffusion Network be disseminated to the Clearinghouse and that coordination with existing dissemination networks will be a priority.

By "dissemination", the conferees intend that Clearinghouse would make available to the Regional Consortia, and through the consortia to the public, for inspection or display only, materials and programs in its repository. Nothing shall be construed to allow the use or copying in any media, or any material collected by the Clearinghouse, that is protected under the copyright laws of the United States unless the permission of the owner of the copyright is obtained. The dissemination system should include a means for users to request or order materials and programs in the repository or to request more information about the program from the publisher or developer, and to assure that the copyright holder has given permission for any use or copying.

The managers intend that the Clearinghouse shall employ, where feasible, both traditional and technologically advanced methods for storing and disseminating materials to the Regional Consortia established in this legislation and to the public.

10F. National Clearinghouse: Programs and Materials. The Senate amendment requires Federal agencies to submit copies of educational materials to the Clearinghouse.

The House recedes.

10G. National Clearinghouse: Copyright Compliance. The Senate amendment requires compliance with the copyright laws.

The House recedes with an amendment adding additional copyright protection language.

Explicit copyright protection is particularly necessary to assure that the Clearinghouse and Consortia, which will be on the cutting edge of new information-management technologies, will strictly

adhere to compliance with the copyright law. This means that the works of private authors funded in whole or in part by the United States or privately published works shall not be copied or disseminated without the permission of the copyright owner.

10H. National Clearinghouse: Application. The Senate amendment requires the applicants to submit an application to the Secretary.

The House recedes.

11. Regional Consortia: The Senate amendment establishes Regional Consortia.

The House recedes with an amendment to the Eisenhower Act to create Regional Consortia.

11A. Regional Consortia: Establishment. The Senate amendment would establish Regional Consortia for Science, Mathematics and Technology Education. The Senate amendment requires consultation with the Director of the National Science Foundation in establishing the consortia and authorizes the Secretary to award grants or contracts.

The House recedes with an amendment striking the word "technology"; requiring that grants be awarded within 12 months of the date of enactment making appropriations available for these provisions; and requiring the Secretary to assure equal distribution of funds among the regions.

11B. Regional Consortia: Location. The Senate amendment allows the Secretary to waive the requirement that there be a consortium in each education region.

The House recedes.

11C. Regional Consortia: Use of Funds. The Senate amendment allows the Regional Consortia to use the funds for a variety of activities. The Senate amendment also requires the Consortia to work under the direction of the regional board.

The House recedes with an amendment adding some additional uses of funds to the Senate provision and adding coordination with the regional educational laboratories.

The managers expect the Regional Consortia to coordinate activities with the regional labs.

The conferees intend that federal funds may be used for materials development if such materials are commercially unavailable. Similar requirements are currently applicable to other elementary and secondary education programs, such as bilingual education, and family-school partnership programs.

11D. Regional Consortia: Application and Review. The Senate amendment requires each applicant to (1) demonstrate expertise in mathematics and science education, (2) demonstrate that the entity will disseminate instructional materials, teaching methods, and assessment tools, (3) demonstrate that the entity will emphasize programs to meet the needs of underserved groups of students, (4) demonstrate that the business community in the region served by the Regional Consortia will play an integral role; and (5) demonstrate that the applicant will consider the resources of the Star Schools consortia.

The House recedes with an amendment requiring, in addition to the Senate provisions, that each applicant (1) demonstrate that the entity shall implement and disseminate science, mathematics and

technology materials, teaching methods, and assessment tools through consortium of the region's science and mathematics education organizations; (2) demonstrate that the applicant would carry out the function of a Regional Consortium at the direction of a regional board; and (3) describe the activities for which assistance is sought. The amendment also requires the applicant to demonstrate expertise in the fields of mathematics and science education, and requires a description of attempts to serve children and teachers from private schools.

11E. Regional Consortia: Approval of Application. The Senate amendment requires the Secretary, in consultation with the Director, to develop criteria and procedures to ensure that grants or contracts are awarded on a competitive, merit basis.

The House recedes with an amendment deleting consultation with the Director of the National Science Foundation.

11F. Regional Consortia: Approval of Application. The Senate amendment establishes a national panel or panels to review the recommendations made by each regional technical review panel to make final recommendations. The Senate amendment requires the Secretary to consult with the Director when establishing the panel to have $\frac{1}{2}$ of the panel members appointed by the Secretary and the $\frac{1}{2}$ appointed by the Director.

The House recedes with an amendment vesting all authority with the Secretary in establishing the panel but requiring consultation with the Director. The amendment also requires that the national review panel include participation, to the extent feasible, from each of the education regions.

The managers intend that the Director will recommend members of the science and engineering community to the Secretary for inclusion on the national review panel or panels. The managers also intend that the review panels include representation from educational practitioners in the regions, including: representatives of the teaching community, state and local educational agencies, private elementary and secondary schools, higher education, informal education, the science, engineering and mathematics community, business and groups that are underrepresented in, and underserved by, science, mathematics and technology education, such as women and minorities.

11G. Regional Consortia: Review Panels. The Senate amendment requires the Secretary, in consultation with the Director, to establish for each region, a panel which shall conduct the technical review of the applications received each year.

The Senate recedes.

11H. Regional Consortia: Regional Board. The Senate amendment requires that regional boards be established by the entity receiving the award and requires that the board be broadly representative of the agencies and organizations participating in the Regional Consortia.

The House recedes with an amendment requiring that no federal funds be used for establishment or operation of the regional board.

11I. Regional Consortia: Payments; Federal Share. The Senate amendment establishes the federal share to be 90% for the first and second fiscal years, 75% for the third and fourth years, and 50% for the fifth year.

The House recedes with an amendment modifying the federal share to 80% in the first and second years, 75% for the third, 65% for the fourth year, and 50% for the fifth year.

11J. Regional Consortia: Payments; Non-Federal Share. The Senate amendment allows the non-federal share to be in cash or in kind, fairly evaluated.

The House recedes.

11K. Regional Consortia: Assessment. The Senate amendment requires the Office of Educational Research and Improvement (OERI) to collect data and evaluate the effectiveness of the regional consortia.

The House recedes with an amendment to delete an assessment of student development as measured by achievement gains from the evaluation of this program.

11L. Amendment to General Education Provisions Act. The Senate amendment requires the Secretary to only award a grant or contract for a regional educational laboratory if such laboratory is to be located in the region of the Nation served by such laboratory.

The Senate recedes.

The conferees intend that a regional laboratory be located in the region it is to serve.

While the Senate recedes on this issue, the conferees also intend that this issue will be considered again during reauthorization of OERI during reauthorization in the next Congress. In the current grant competition, in the event a laboratory cannot be located within the region, the conferees intend that an entity be chosen to serve that area only if it has an established relationship with the area, and has served that area on an ongoing basis for several years.

11M. Definitions. The Senate amendment defines the terms "eligible entity," "region", and "Regional Consortium".

The House recedes.

11N. Authorization of Appropriations. The Senate amendment establishes the authorization at \$19 million for FY 1991 and such sums as may be necessary for FY 1992, FY 1993, FY 1994, and FY 1995.

The House recedes with an amendment to authorize \$17 million for FY 1991 with such sums as necessary for FY 1992 and FY 1993. The amendment also requires the Secretary, in consultation with the heads of other appropriate agencies, to prepare a report listing all sources of federal aid for mathematics and science education.

12. Technology and Learning Center. The Senate Amendment establishes a Technology and Learning Center to conduct and disseminate interdisciplinary research on the ways people learn and how technologies can be used to facilitate their learning.

The Senate recedes.

It is the understanding of the conferees that, in the new competition for the OERI Centers, the Centers will consider a number of overarching themes. The conferees expect one of the themes for the appropriate Centers, including those on learning, to recognize the impact of new technologies on learning. The conferees note the work of the Educational Technology Center created in 1988 and expect cooperation with this existing Center as well.

13. Innovative Technologies. The Senate amendment authorizes the Director of the National Science Foundation to award grants for Star Schools projects that provide statewide or multi-state telecommunications and computer technology, geared for mathematics and science education programs to underserved urban, rural or poverty areas.

The House recedes with an amendment changing the wording.

The conferees do not intend subsection Sec. 221 (A) to require any changes in the National Science Foundation's current educational technology programs. The subsection is designed to give NSF a statutory mandate to carry out its programs and to encourage its programs to expand in size.

The lists of possible uses of the funds in paragraphs 221(A)(3) and 221(B)(3) are not intended to be inclusive. NSF continues to be permitted to award funds for other purposes, including the establishment of inter- and intra-state computer networks.

Subsection 221(B) is designed to create a research program on distance learning technologies. The conferees do not intend for NSF to supply operational funding for school districts or any other entities. However, funds provided for the purposes listed in paragraph 221(B)(3) may include money to purchase and test the equipment or materials in a specific location.

The conferees anticipate that, in awarding funds under Section 221, NSF will continue its policy of awarding funds only to non-profit entities. Such entities may be consortia that include for-profit participants.

The conferees also intend that NSF give special consideration to proposals for research to adapt existing technology to new purposes, as stated in paragraph 221(C)(2). For example, software developed for one subject might be adapted to another subject area. Or, hardware developed for a different purpose might be adapted for distance or interactive learning.

14. Informal Mathematics, Science and Technology Education. The Senate amendment authorizes the Director of National Science Foundation to award grants to museums, planetariums or zoos for the purpose of disseminating and developing more effective hands-on, interactive activities, giving special priority to benefiting elementary school students.

The House recedes with an amendment striking the terms "museums, planetariums, libraries" and "zoos" and defining the remaining term "science-technology center" as a nonprofit institution which may include the above institutions as well as others open to the general public which provide exhibits, demonstrations and informal science education designed to illustrate science's place in society; replacing (a)(1)(B) "make . . . community" with "replication and/or dissemination of effective programs and activities," and in (a)(1)(C) opening the program to new and developing science-technology centers.

In section 231, the conferees intend the term "new science-technology centers" to mean centers that have not yet opened or have just recently opened. The purpose of the Section 231(a)(1)(C) is to ensure that grants are awarded to science-technology centers that may now be excluded from NSF programs because the centers have

not been in operation a sufficient amount of time. The conferees want to see more centers in operation throughout the nation.

15. Systemic reform. The Senate amendment, but not the House bill, authorizes the Director of the National Science Foundation to award grants to local education agencies for the purpose of making system-wide improvements in math and science education and authorizes \$19 million for this activity.

The House recedes with an amendment requiring the Director's consultation with the Secretary of Education, authorizing the award of grants to States and State education agencies but not to local educational agencies, requiring grant proposals to include the use of other Federal funds, reducing the authorization to \$17 million, and requiring that the funds come from existing authority under NSF.

In those States in which members of the States board of education are elected (including election by the State legislature) or in which the chief state school officer is directly elected by the citizens, it is the intent of the conferees that the State education agency will be the primary recipient of this grant.

The conferees do not intend that the systemic reform section require any changes in the National Science Foundation program "Statewide Systemic Initiatives in Science, Mathematics and Engineering Education" as presented in solicitation OMB No. 3145-0058.

16. Technical Amendment. The Senate amendment has a technical amendment to the National Science Foundation Act.

The House recedes.

17. Centers of Excellence. The Senate amendment authorizes the Director of the National Science Foundation to award grants to institutions of higher education lacking strong mathematics, science and engineering departments for the purpose of strengthening their undergraduate teaching in these fields.

The House recedes with an amendment establishing that the grants are awarded to faculty with a record of excellence in teaching; defining possible uses of the grants as curriculum development, faculty training, educational equipment, support for research and professional activities, and support of teaching fellows; and establishing the following selection criteria: commitment of the institution to improve undergraduate education in the said fields, teaching ability and accomplishments of the applicant, and the impact of the grant on improving undergraduate instruction.

The conferees believe that technician training is critical to maintaining a highly skilled technical workforce in the United States, and share the concern that the Department of Education, National Science Foundation and other federal agencies may not be doing enough to strengthen and improve science and technology education in two-year colleges. The conferees agreed to assess technician training needs and to work together to seek solutions to any problems identified.

18. National Mathematics-Science Teacher Corps. The House bill contains a two-year scholarship program which awards scholarships to students enrolled in an undergraduate program in science, mathematics or engineering who are willing to commit to teach elementary or secondary science or mathematics. The Senate bill

contains a similar program, The National Mathematics-Science Teacher Corps, which is based on the same criteria.

The Senate recedes to the House with an amendment to adopt as a new title the Robert Noyce Scholarship Program in Sec. 403 of S. 695 as passed by the House, as well as the National Science Scholars Program in Sec. 402 of S. 695 as passed by the House.

19. Teacher Corps: Eligibility. The House bill, but not the Senate amendment, limits eligibility to U.S. citizens or lawfully admitted citizens.

The Senate recedes with an amendment to adopt the eligibility requirements of the Robert Noyce Scholarships. (See 18.)

20. Teacher Corps: Selection Criteria. Both the House bill and the Senate amendment include criteria based on merit, and consideration to financial need and to minorities, women and disabled individuals, except that these considerations are permissive in the House bill. The House bill states that merit must be shown in mathematics, science and engineering.

The Senate recedes with an amendment to adopt the Robert Noyce Scholarships (see 18.) selection criteria, which includes academic merit, accomplishment in science, mathematics, and engineering, and motivation to pursue a career in one of these fields. In addition, consideration may be given to minorities and individuals with disabilities.

21. Teacher Corps: Amount of Award. In the Senate amendment, participants receive awards of \$5000 per year, maximum two years per recipient. In the House bill, participants receive two-year awards of \$7500 per year, maximum one award per recipient. Both bills allow recipients to receive funds for a third year if they have completed their undergraduate degree but need additional credits for certification.

The House recedes with an amendment to adopt the procedure of award in the Robert Noyce Scholarship program (See 18.)

22. Teacher Corps: Maintaining Eligibility. The House bill, but not the Senate amendment, sets forth requirements for maintaining eligibility in the program.

The House recedes with an amendment to adopt the procedures of the Robert Noyce Scholarship Program. (See 18.)

23. Teacher Corps: Service Requirement. Both the House bill and the Senate amendment require recipients to teach for two years, in a Chapter One School, for each year of financial support received under this act, except that the House bill, and not the Senate amendment, limits the number of years that recipients can be required to teach to four years.

The Senate recedes with an amendment to adopt the language of the conference agreement upon the Robert Noyce Scholarship program. (See 18.)

24. Teacher Corps: Failure to Complete Service Obligation. Both the House bill and the Senate amendment describe the circumstances under which recipients would have to repay all or part of the award. The House bill, but not the Senate amendment, includes the additional circumstance "if the individual . . . declares intent not to fulfill the service obligation."

The Senate recedes with an amendment to adopt the language of the conference agreement upon the Robert Noyce Scholarship program. (See 18.)

25. Teacher Corps: Amount of Repayment. The Senate amendment authorizes the Director to determine the schedule for repayment and amount of interest. In the House bill, the U.S. Treasurer determines the amount of interest, according to the highest legal rate when the awards were received. The schedule of repayment is determined by this act: funds must be repaid within one year after participant was disqualified from the program on a yearly schedule.

The Senate recedes with an amendment to adopt the language of the conference agreement upon the Robert Noyce Scholarship program. (See 18.)

26. Teacher Corps: Exceptions. The House bill, but not the Senate amendment, provides exceptions to the pay back provisions in the event of extreme hardship or bankruptcy.

The Senate recedes with an amendment to adopt the language of the conference agreement upon the Robert Noyce Scholarship program. (See 18.)

27. National Science Scholars Program. Both the House bill and the Senate amendment establish a National Science Scholars program. The Senate amendment amends the Higher Education Act while the House bill does not.

The Senate recedes with a series of amendments based on the National Science Scholars Program in Sec. 402 of S. 695 as passed by the House, but establishing this title in a separate title.

28. National Science Scholars Program: Purpose. The Senate amendment, but not the House bill, sets forth the purposes of this act.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

29. National Science Scholarship Program: Establishment. Both the Senate amendment and the House bill authorize the award of yearly scholarships to one male and one female from each congressional district for the study of science, mathematics and engineering.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

30. National Science Scholarship Program: Eligibility. The Senate amendment, but not the House bill, extends eligibility to the District of Columbia, Puerto Rico and the listed territories.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

31. National Science Scholarship Program: Special Consideration. The Senate amendment gives special consideration to disadvantaged and underrepresented groups in the science, mathematics and engineering professions.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

32. National Science Scholarship Programs: Disbursal of Scholarship Proceeds. The Senate amendment requires the Secretary to disburse awards to the institution on behalf of the recipient, rather than to the recipients themselves.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

33. National Science Scholarship Programs: National Science Scholars. The Senate amendment gives the titles of "National Science Scholarship Finalist" to recipients and nominees, respectively.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

34. National Science Scholarship Program: Relation to Other Grants. Both the Senate amendment and the House bill limit the award to "students' cost of attendance."

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

35. National Science Scholarship Program: Financial. In the Senate amendment the award is considered income for the purposes of determining eligibility for student financial aid.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

36. National Science Scholarship Program: Special Rule. The Senate amendment encourages other entities to provide scholarship assistance to National Science Scholarship Finalists.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

37. National Science Scholarship Program: Announcement. Both the Senate amendment and the House bill require the Director to inform Members of Congress of award winners before the selections are made public.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

38. National Science Scholarship Program: Eligibility. In the Senate amendment, students are eligible who are: (1) U.S. citizens or lawfully admitted aliens, (2) high school seniors or recipients of graduate equivalency diploma, and (3) enrolled in or intend to apply to college. In the House bill, students are eligible who are (1) U.S. citizens or lawfully admitted aliens, and (2) high school seniors or graduates applying as a freshman to an undergraduate program.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

39. and 40. National Science Scholarship Programs: Maintaining Eligibility. Both the Senate amendment and the House bill require that in order to maintain eligibility, a student must be enrolled in an accredited institution; major in any field of science, mathematics or engineering; and carry a full academic workload, except in special cases.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

41. National Science Scholarship Programs: Academic Standing. The Senate amendment requires recipients to maintain good academic standing as determined by the institution; the House bill requires the standard to be determined by the Director.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

42. National Science Scholarship Programs: Exceptions. The Senate amendment specifies pregnancy and family responsibilities as an additional exception under this part.

The Senate recedes with an amendment to adopt the National Science Scholars program. (See 27.)

43. National Science Scholarship Programs: Time Limit. The House bill limits each exception to two years, after which the recipient must reapply for an extension.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

44. National Science Scholarships Programs: Nature and Amount. The Senate amendment awards scholarships of up to \$5000 per year for four years. The House bill awards scholarships equal to \$5000 per year for four years.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

45. and 46. National Science Scholarship Programs: Increase. The House bill permits an increase in the amount of award to accommodate students completing four-year programs in less than four years.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

47. National Science Scholarship Programs: Insufficient Funds. The Senate amendment reduces the amount of each award in the event that funds are insufficient to award all recipients in a fiscal year.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

48. National Science Scholarship Programs: Excess Funds. The Senate amendment allows any excess funds to be awarded to National Science Scholarship Finalists.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

49. National Science Scholarship Programs: Nominating Committees. Both the House bill and the Senate amendment establish procedures for selecting award recipients, but the House bill and Senate amendment differ considerably in this respect.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

50. National Science Scholarship Programs: Notification. In the Senate amendment and in the House bill, the Secretary and the Director, respectively, must annually notify all secondary schools and institutions of higher education of the availability of scholarships under this act.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

51. National Science Scholarship Programs: Nomination. Both the Senate amendment and the House bill include as criteria for nomination and selection: the promise to complete a post-secondary program in mathematics, science and engineering; and the motivation to pursue a career in one of these fields.

The Senate amendment but not the House bill includes the criteria: outstanding academic achievement in the said fields; and promise of outstanding academic achievement.

The House bill but not the Senate amendment adds that consideration will be given to financial need and promoting participation of minorities and students with disabilities.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

52. National Science Scholarship Programs: Failure to Maintain Eligibility. The House bill but not the Senate amendment requires that a recipient who fails to maintain eligibility repay the United States with interest.

The House recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

53. National Science Scholarship Programs: Failure to Maintain Eligibility. The Senate amendment states that if a recipient fails to maintain eligibility, the Director shall determine whether he or she is eligible for further scholarships.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

54. National Science Scholarship Programs: Monitoring. The House bill but not the Senate amendment requires the Director to monitor the implementation of nominating committees; ensure that solicitation and selection of students, as well as the election of committees be carried out without discrimination.

The House recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

55. National Science Scholarship Programs: Summer Employment. In the Senate amendment recipients are given priority for federally financed summer employment in federally funded research and development centers.

The House recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

56. National Science Scholarship Programs: Federal Agency Compliance. The Senate amendment requires that Federal agencies play an active role in providing appropriate summer employment opportunities for recipients.

The House recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

57. and 58. National Science Scholarship Programs: Effective Date. The Senate amendment states that the effective date of the act is 10/1/90.

The Senate recedes with an amendment to adopt the National Science Scholars Program. (See 27.)

59A. Graduate Fellowships. The Senate amendment authorizes the Director of the National Science Foundation to increase the number of National Science Foundation Graduate Fellowships to 1200 per year, beginning in 1993, emphasizing participation of women and minorities.

The House recedes.

59B. Graduate Traineeships. The Senate amendment authorizes the Director to award grants to institutions of higher education to conduct traineeships encouraging students to continue education and research in mathematics, science and engineering.

The House recedes with an amendment making clear the program is merit-based and changing special rules of Sec. 323(b) by striking "from traineeship programs" in paragraph (2); by replacing "historically . . . fellowships" with "demonstrated progress and an ongoing commitment to upgrading their capabilities to perform high quality research and are not among the institutions currently

receiving a large number of student recipients of National Science Foundation Graduate Fellowships" in paragraph (3); and striking paragraph (4).

60. Title IV: Women and Minorities in Mathematics, Science and Engineering. The Senate amendment contains provisions for increasing minority and women participation in mathematics, science and engineering.

The House recedes.

61. Distinguished Visiting Professors. The Senate amendment authorizes the Director of the National Science Foundation to award fellowships to distinguished women and minority faculty members for the purpose of enabling them to visit institutions of higher education that lack the resources to attract such distinguished faculty on a long-term basis.

The House recedes.

62. Faculty Awards for Women and Minorities. The Senate amendment authorizes the Director to award grants to institutions of higher education for the purpose of recruiting and retaining women and minority faculty.

The House recedes.

63. Alliances for Minority Participation. The Senate amendment authorizes the Director to award grants to institutions of higher education for the purpose of establishing and maintaining partnerships between research institutions of higher education and those with predominately minority enrollment.

The House recedes.

64. Title V: Federal Laboratory Partnerships. The Senate amendment contains a title to encourage partnerships between federal laboratories and educational institutions by—

- establishing an education office within each Federal mission office to administer, oversee and disseminate information on education programs within the agency;

- establishing within the agency two programs for awarding grants to institutions of higher education to enhance undergraduate and graduate education in critical academic areas;

- establishing within each mission agency two programs to enhance mathematics and science knowledge of elementary and secondary school students and faculty;

- provide training for agency employees in critical academic areas.

In addition, each Federal laboratory director is required to the maximum extent practicable, to enter into education partnerships with elementary and secondary schools and institutions of higher education to:

- provide equipment and personnel support to schools;

- establish research programs for students; and

- establish mentorships with elementary and secondary school students.

The House recedes with an amendment changing the program to a Science Education Report which requires the Director of the Office of Science and Technology Policy, through the Federal Coordinating Council on Science, Engineering and Technology, to prepare a report on education in mathematics, science and technology. The amendment also requires the Secretary to compile a report on

other education programs involving Federal agencies. Finally, the amendment authorizes several science, math and engineering education programs at the Department of Energy, which may be carried out by the Department's research and development facilities.

65. Two-Year Career Option. The House bill authorizes the Director of the National Science Foundation to establish a scholarship program for students pursuing higher education studies in science, mathematics or engineering fields in which there is a shortage.

The Senate recedes with an amendment making the program a 4-year scholarship program administered by a National Academy of Science, Space and Technology, established within the department, for the instruction and preparation of selected individuals for service in a science-, mathematics- or engineering-related capacity. The Academy's Advisory Board will develop criteria to be used in selecting scholarship recipients and identify the fields which will be given priority under this section. From nominations submitted by members of Congress, the board will select one scholarship recipient from each district.

66. Effect of Certain Controlled Substance and Felony Convictions. The House bill bars a convicted drug user or distributor from receiving any awards and requires that the student repay any awards received.

The Senate recedes.

67A. Department of Education Evaluation Programs. The Senate amendment contains a section requiring the Secretary to conduct evaluations of the programs, activities and responsibilities of the Secretary authorized under the Act and report the findings to Congress on September 30, 1995.

The Senate recedes.

67B. National Science Foundation Evaluation Program. The Senate amendment requires the Director to conduct evaluations of the programs, activities and responsibilities of the Director under this Act and report the findings to Congress on September 30, 1995.

The Senate recedes.

68. Definitions. The Senate amendment contains a "Definitions" section.

The House recedes with an amendment to adjust definitions included in the section to the form of the bill agreed to by the conferees.

69. Authorization of Appropriations. The House bill amends the National Science Foundation Authorization Act of 1988 by increasing the overall authorization for the National Science Foundation and then earmarking that increase for the three scholarship programs contained in the House bill. Authorization: \$13 million in 1990; \$26 million in 1991; \$35.25 million in 1992 and \$40.75 million in 1993.

The Senate amendment authorizes the National Science Scholars Program and the Math/Science Teacher Corps separately. For the National Science Scholars Program, the Senate amendment authorizes \$6 million for 1991, and such sums in 1992 and 1993.

For the Math/Science Teacher Corps, the Senate amendment authorizes \$44 million for four programs: Centers of Excellence (301), Math/Science Teacher Corps (302), Graduate Fellowships (321), and Graduate Traineeships (322). The overall authorization in the

Senate amendment is \$125 million, which, for all but the National Science Scholars program, is for 1991 and such sums to 1995.

The Senate recedes with an amendment authorizing funds for the programs under the Department of Education and those under the National Science Foundation separately, and changing the particular authorization levels for the programs included in the conference agreement.

70. National Science Foundation Report. The House bill requires the National Science Foundation to submit to Congress a report on the status of mathematics and science education and the career potential for the underprivileged.

The Senate recedes.

ROBERT A. ROE,
GEORGE E. BROWN, Jr.,
DOUG WALGREN,
TIM VALENTINE,
DAVID E. PRICE,
ROBERT S. WALKER,
SHEREY BOEHLERT,
D. FRENCH SLAUGHTER, Jr.,
GUS HAWKINS,
WILLIAM D. FORD,
PAT WILLIAMS,
MAJOR R. OWENS,
TOM SAWYER,
BILL GOODLING,
TOM COLEMAN,
STEVE BARTLETT,

Managers on the Part of the House.

EDWARD M. KENNEDY,
CLAIBORNE PELL,
CHRISTOPHER J. DODD,
ORRIN HATCH,
NANCY LANDON KASSEBAUM,

Managers on the Part of the Senate.

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